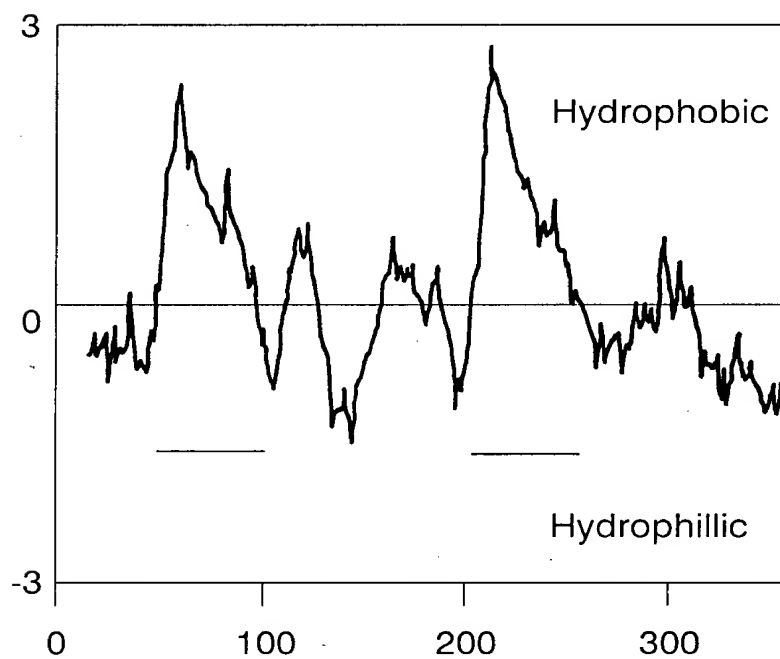
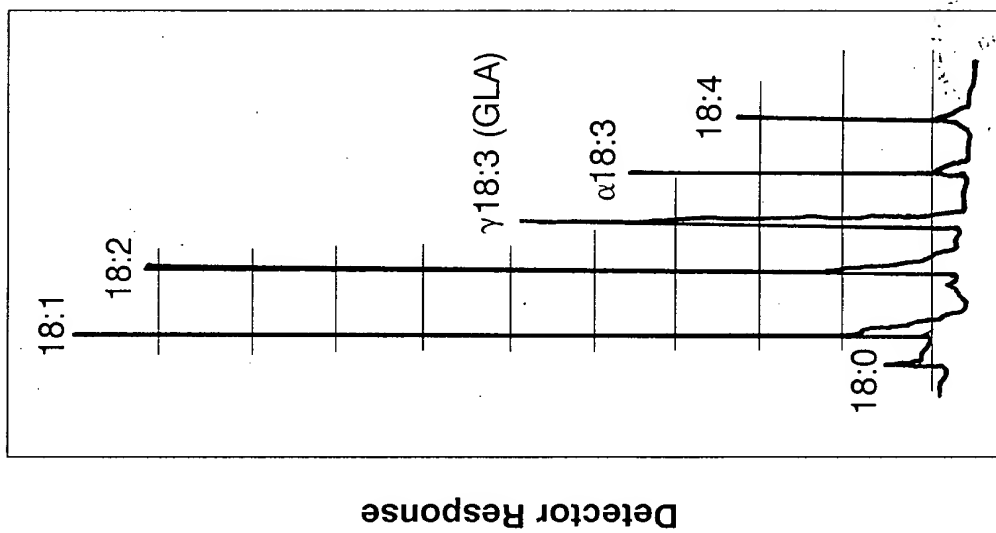
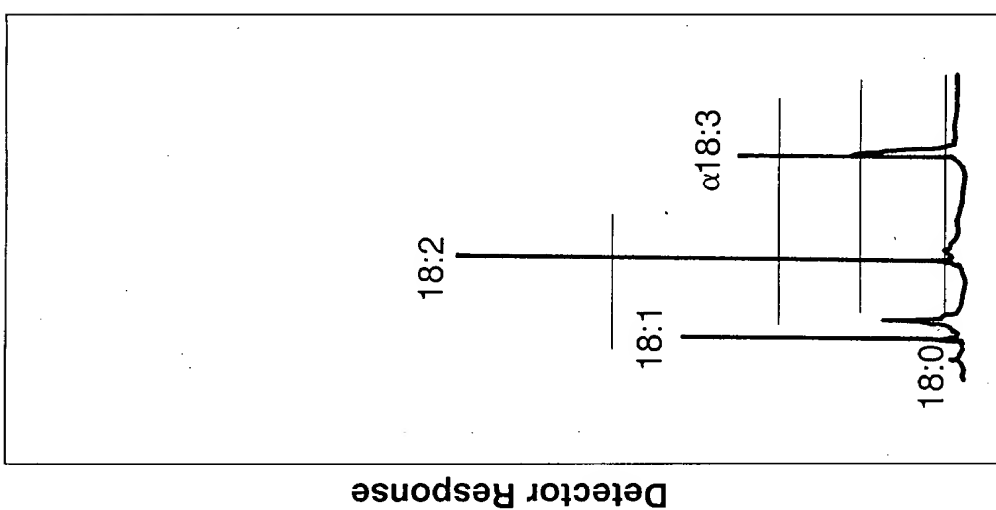
**FIGURE 1A****FIGURE 1B**



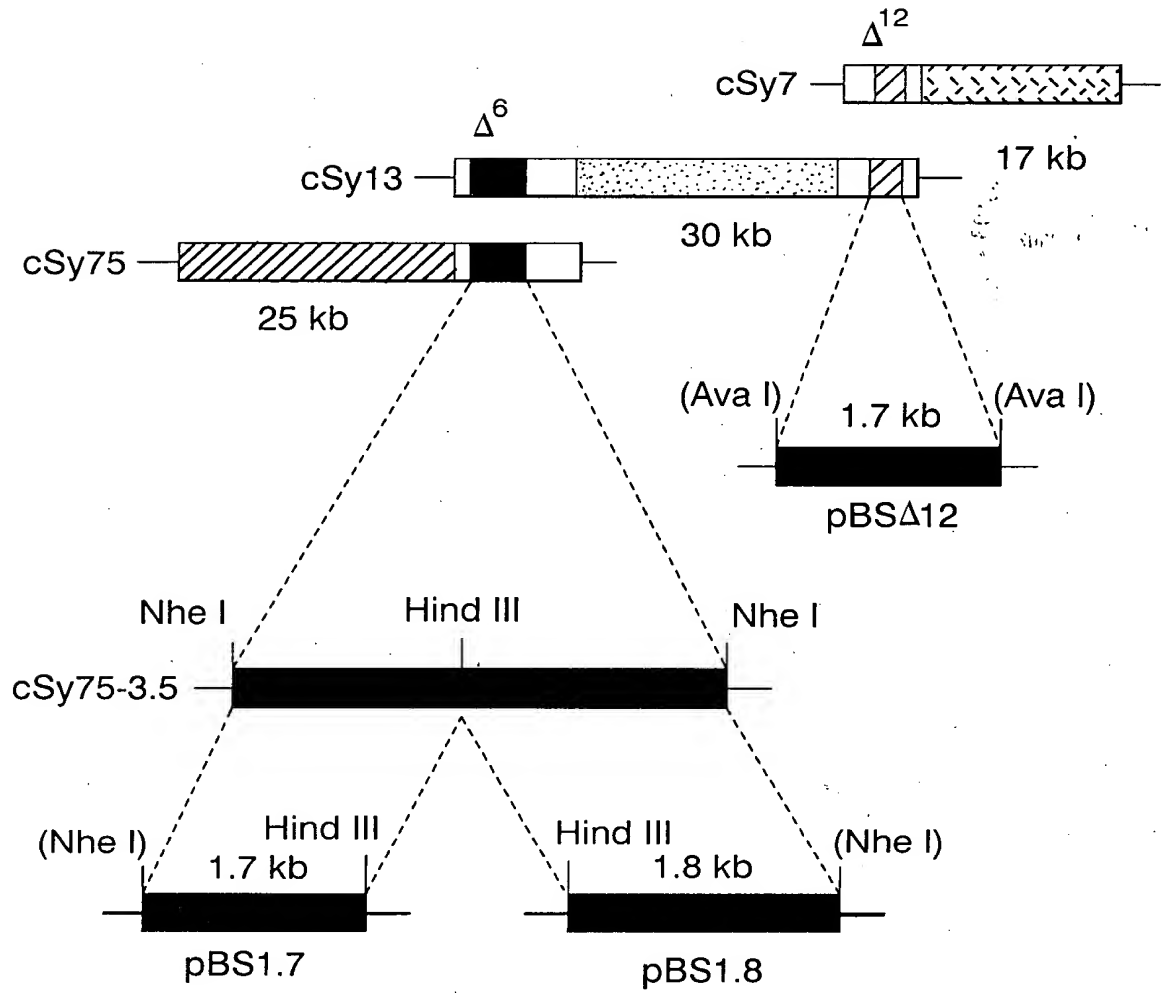
Retention Time

FIGURE 2B



Retention Time

FIGURE 2A

**FIGURE 3**

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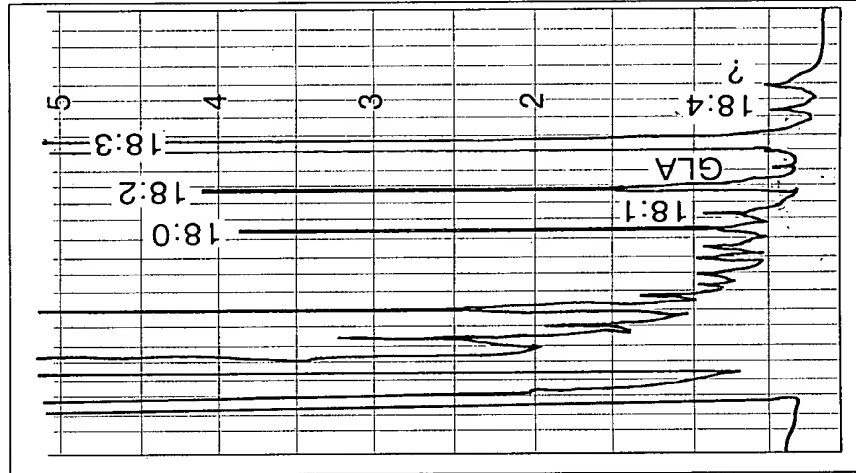


FIGURE 4B

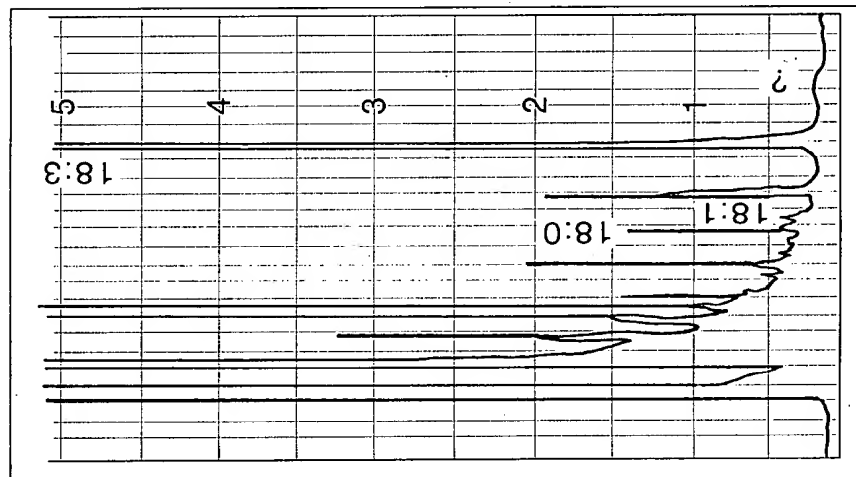


FIGURE 4A

A - - - - - A

```

1  aatatctgccc  taccctccca  aagagagtag  tcatTTTTca  tcaatggctg
81  aactcaagaa  ccacgataaa  cccggagatc  tatggatctc  gattcaaggg
161  gaccatccag  gtggcagctt  tcccttgaag  agtcttgctg  gtcaagaggt
241  ctctacatgg  aagaatcttg  ataagttttt  cactgggtat  tatcttaaa
321  ataggaaagct  tgtgttgag  tttctaaaa  tgggtttgta  tgacaaaaaa
401  atagcaatgc  tgtttgctat  gagtgtttat  ggggttttgt  tttgtgagg
481  gatggggttt  ctttggattc  agagtgggtg  gatlggacat  gatgctgggc
561  ataaagtatat  gggatatatt  gctgcaaat  gtctttcagg  aataagtatt
641  cacattgcct  gtaatagcct  tgaatatgac  cctgatttac  aatatatacc
721  ttcactcacc  tctcatTTct  atgagaaaa  gttgactttt  gactctttat
801  cattttaccc  tattatgtgt  gctgctaggc  tcaatatgta  tgtacaatct
881  tcctatcgag  ctcaaggaa  ctgggatgc  ctagtgttct  cgatttggta
961  gggtgaaaga  attatgtttg  ttattgcaag  ttatcagtg  actggaatgc
1041  ctccaagtgt  ttatgttgga  aagcctaaag  ggaataatlg  gtttgagaaa
1121  cctcccttga  tggattgggt  tcatgggtga  ttgcaattcc  aaattgagca
1201  ccttaggaaa  atctcgccct  acgtgatcga  gttatgcaag  aaacataatt
1281  ccaatgaaat  gacactcaga  acattgagga  acacagcatt  gcaggctagg
1361  gtatgggaag  ctcttcacac  tcatgggttaa  aattaccctt  agttcatgta
1441  gtgtcttgtc  ttggttctac  ttgttggagt  cattgaaact  tgtcttttat
1521  gaggttttgc  ttcatctccc  attattgatg  aataaggagt  tgcatattgt
1601  gaatgtactt  tgtaccactg  tgttttcagt  tgaagctcat  gtgtacttct
1681  tattt

```

FIGURE 5A(1)

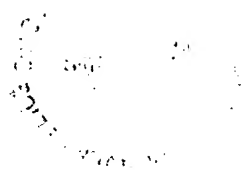
FIGURE 5A(2)

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A - - - - - A

1 MAAQIKKYIT SDELKNHDKP GDLWISIQGK AYDVSDWVKD HPGGSFPLKS
81 LKDYSVSEVS KDYRKLVFEF SKMGLYDKKG HIMFATLCFI AMLFAMSVYG
161 AGHYMVVSDS RLNKFMGIFA ANCLSGISIG WWKWNHNAHH IACNSLEYDP
241 SLSRFFVSYQ HWTFFYPIMCA ARLNMYVQSL IMLLTKRNVSYRAQELLGCL
321 GMQQVQFSLN HFSSSVYVGK PKGNNWFEEK TDGTLDISCP PWMDWFHGG
401 HNL PYN YASF SKANEMTLRT LRNTALQARD ITKPLPKNLV WEALHTHG

FIGURE 5B(1)

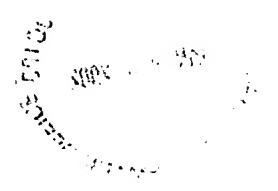


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A | | | | | A

LAGQEVTD	AF	VA	FH	P	A	S	T	W	K	N	L	D	K	F	F	T	G	Y	Y	80										
VL	F	C	E	G	V	L	V	H	L	F	S	G	C	L	M	G	F	L	W	I	Q	S	G	W	I	G	H	D	160	
D	L	Q	Y	I	P	F	L	V	V	S	S	K	F	F	G	S	L	T	S	H	F	Y	E	K	R	L	T	F	D	240
V	F	S	I	W	Y	P	L	L	V	S	C	L	P	N	W	G	E	R	I	M	F	V	I	A	S	L	S	V	T	320
Q	F	Q	I	E	H	H	L	F	P	K	M	P	R	C	N	L	R	K	I	S	P	Y	V	I	E	L	C	K	K	400
																													448	

FIGURE 5B(2)



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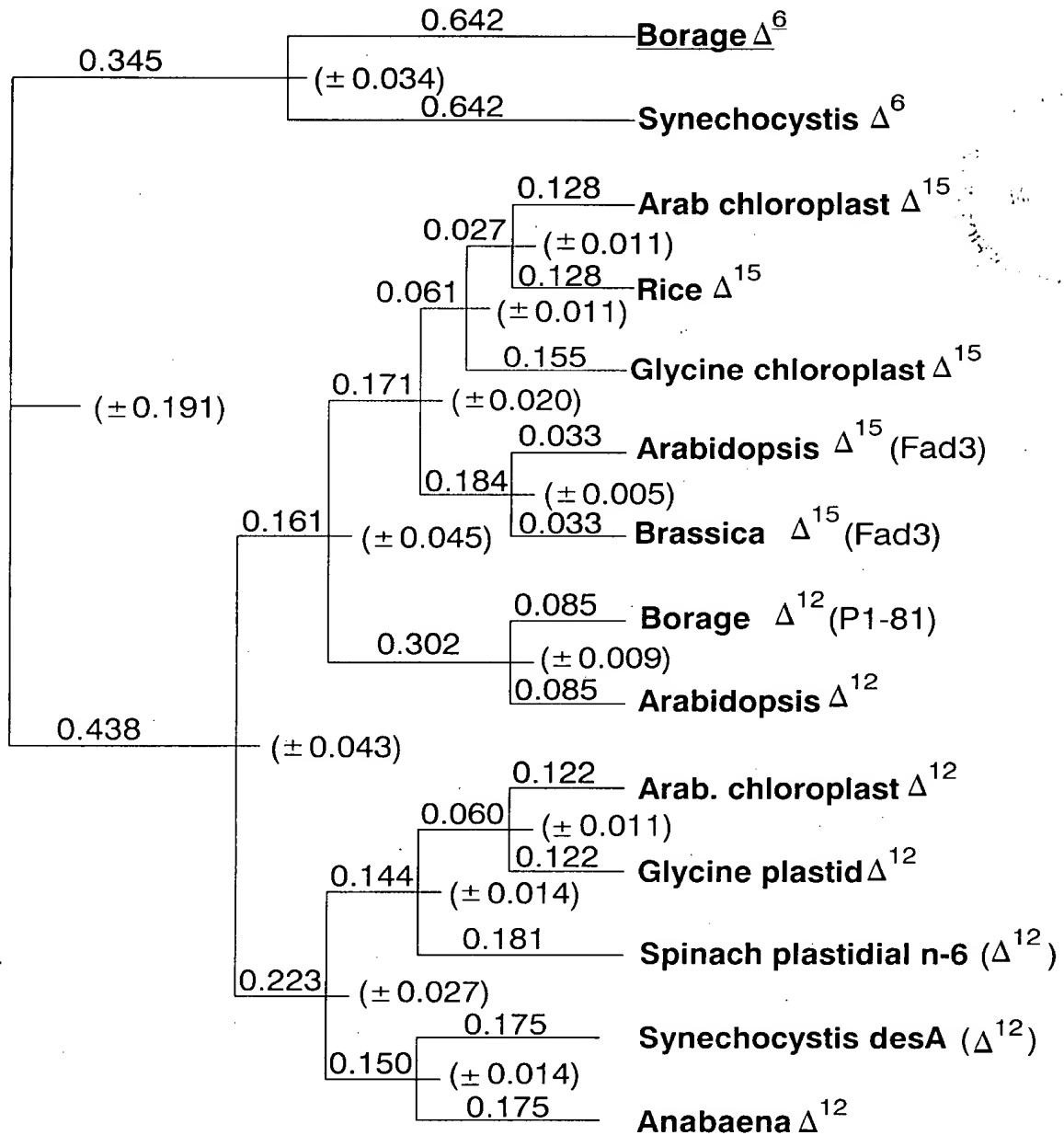
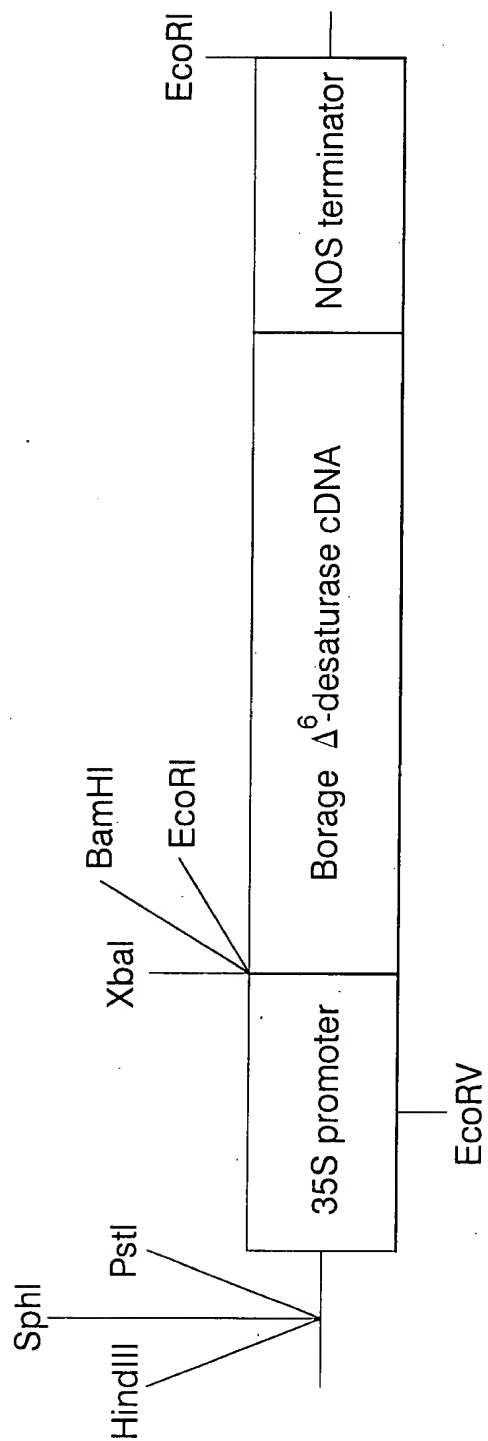


FIGURE 6

**FIGURE 7**

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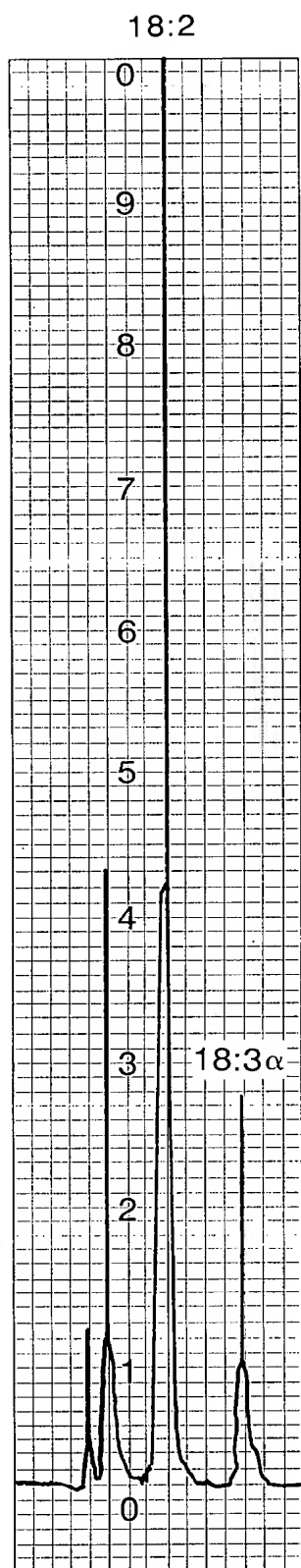


FIGURE 8A

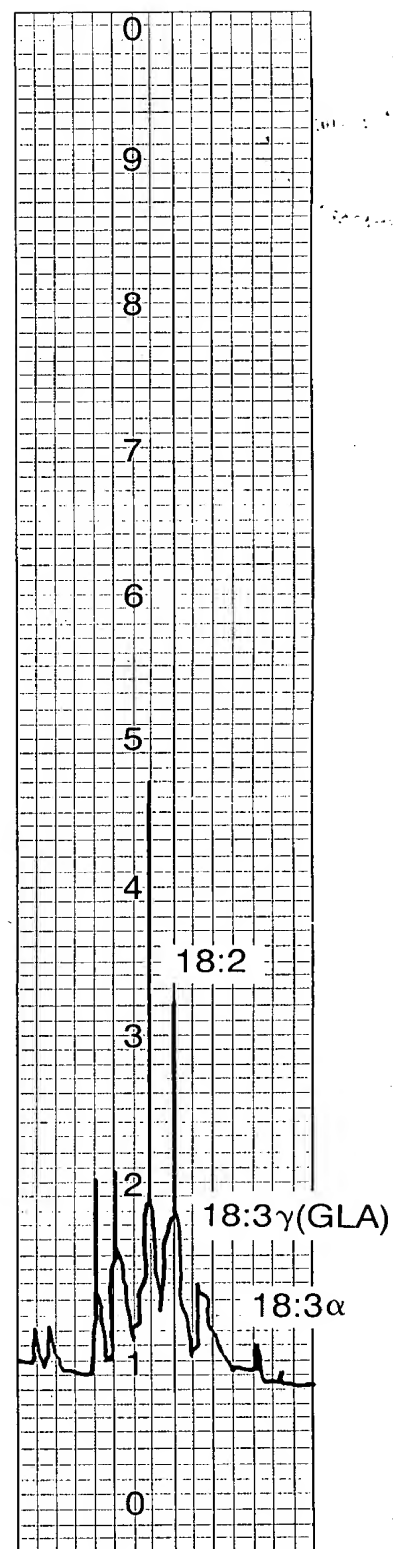


FIGURE 8B

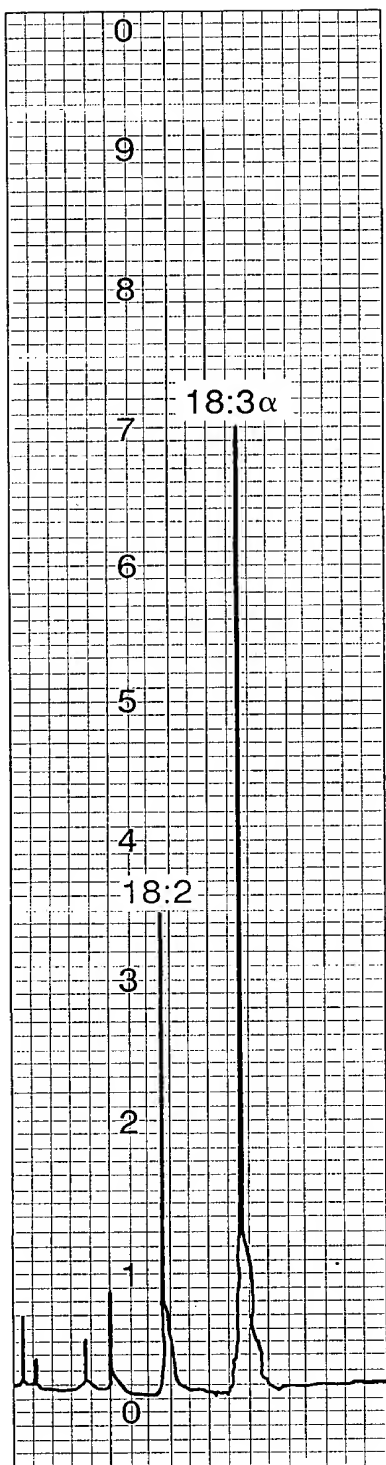


FIGURE 9A

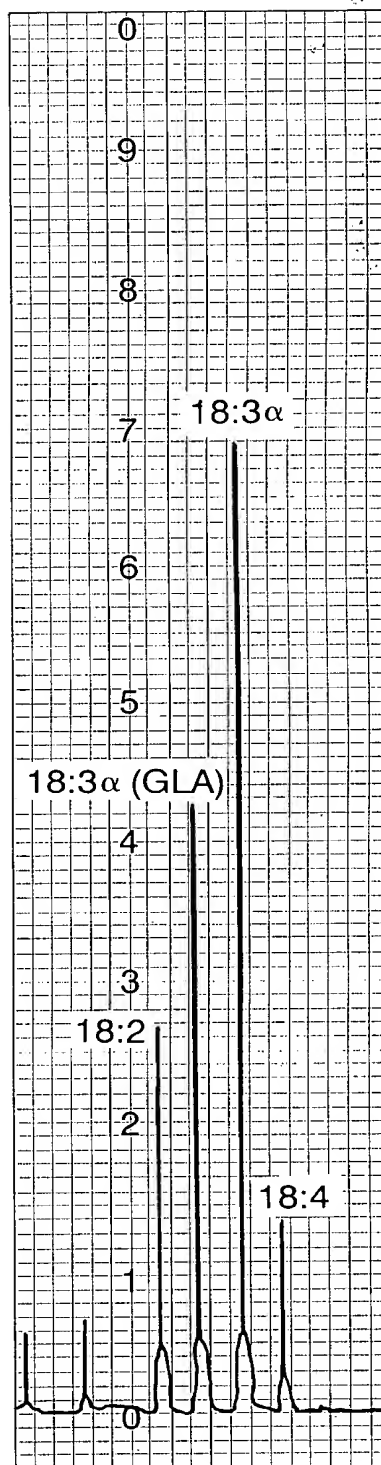


FIGURE 9B

Complete DNA sequence and deduced amino acid sequence of
Evening Primrose Putative $\Delta 6$ -desaturase

A

GCT	AAG	AAG	AAG	TAT	ATC	ACG	GCG	GAG	GAC	CTC	CGC	CGC	CAC	AAC
A	K	K	Y	I	I	T	A	E	D	L	R	R	H	N
ATC	TCC	ATC	CAG	GGC	AAG	GTC	TAC	GAC	GTC	TCT	CGG	TGG	GCG	
I	S	I	Q	G	K	V	Y	D	V	S	R	W	A	
GAG	GTC	CCG	CTC	CTC	ATG	CTG	GCC	GGC	CAG	GAC	GTC	ACC	GAC	
E	V	P	L	L	M	L	A	G	Q	D	V	T	D	
CCG	GGC	ACG	GCG	TGG	CGG	CAT	CTG	GAT	CCG	CTC	TTC	ACC	GGC	
P	G	T	A	W	R	H	L	D	P	L	F	T	G	
GAA	GTG	TCG	GAG	ATC	TCC	AAG	GAC	TAC	CGG	AGG	CTT	TTG	AAC	
E	V	S	E	I	S	K	D	Y	R	R	L	L	N	
ATC	TTC	GAG	AAG	AAG	GGC	CAC	CAC	ATC	ATG	TGG	ACG	TTC	GTC	
I	F	E	K	K	G	H	H	I	M	W	T	F	V	
GCG	GCA	ATC	GTC	TAC	GGC	GTG	CTG	GCG	TCG	GAG	TCC	GTC	GGA	
A	A	I	V	Y	G	V	L	A	S	E	S	V	G	
GCA	CTG	CTG	GGC	TTG	CTG	TGG	ATC	CAA	GCC	GCG	TAT	GTG	GGC	
A	L	L	G	L	L	W	I	D	A	A	Y	V	G	

A

B - - - - - B

FIGURE 10A

-----A

• **A**

A circular diagram illustrating the factors influencing the 'Economic Environment'. The central circle is labeled 'Economic Environment'. Surrounding it are seven boxes, each representing a different factor, with arrows pointing from each box towards the center:

- Government Policy** (top)
- Market Structure** (top-right)
- Technology** (right)
- Resource Availability** (bottom-right)
- Social Norms** (bottom)
- Cultural Values** (bottom-left)
- Political Stability** (left)
- Infrastructure** (top-left)

FIGURE 10B

CAG	GTG	ATG	CCA	ACC	CGT	GGA	TAC	AAC	AGA	ATC	ACG	CAA	CTC
Q	V	M	P	T	R	G	Y	N	R	I	T	Q	L
ACC	GGA	ATC	AGC	ATC	GCG	TGG	TGG	AAG	TGG	ACC	CAC	AAC	GCC
T	G	I	S	I	A	W	W	K	W	T	H	N	A
AGC	CTC	GAC	TAC	GAC	CCC	GAC	CTC	CAG	CAC	ATC	CCC	GTA	TTC
S	L	D	Y	D	P	D	L	Q	H	I	P	V	F
TTC	AAC	TCC	ATC	ACC	TCG	GTC	TTC	TAT	GGC	CGA	GTC	CTG	AAA
F	N	S	I	T	S	V	F	Y	G	R	V	L	K
TTC	CTA	GTC	AGC	TAC	CAG	CAC	TGG	ACC	TAC	TAC	CCG	GTC	ATG
F	L	V	S	Y	Q	H	W	T	Y	Y	P	V	M
CTC	TTC	ATC	CAG	ACC	TTT	TTA	TTG	CTC	CTC	ACC	AGG	CGC	GAC
L	F	I	Q	T	F	L	L	L	L	T	R	R	D
AAC	TTA	ATG	GGT	ATC	GCG	GTT	TTC	TGG	ACG	TGG	TTC	CCG	CTC
N	L	M	G	I	A	V	F	W	T	W	F	P	L
AAC	TGG	CCT	GAA	CGG	TTC	GGG	TTC	GTC	CTC	ATC	AGC	TTT	GCG
N	W	P	E	R	F	G	F	V	L	I	S	F	A
GTC	CAG	TTC	ACG	CTC	AAC	CAC	TTC	TCC	GGC	GAC	ACA	TAC	GTG
V	Q	F	T	L	N	H	F	S	G	D	T	Y	V

FIGURE 10C

D	C													C	

	ATA	GCA	GGC	AAC	ATC	CTA									
	I	A	G	N	I	L									
	CAC	CAC	CTC	GCC	TGC	AAC									
	H	H	L	A	C	N									
	GCC	GTC	TCC	ACC	CGA	CTC									
	A	V	S	T	R	L									
	TTC	GAC	GAA	GTG	GCA	CGG									
	F	D	E	V	A	R									
	ATC	TTC	GGC	CGA	GTC	AAC									
	I	F	G	R	V	N									
	GTC	CCT	GAC	CGC	GCT	CTA									
	V	P	D	R	A	L									
	TTC	GTA	TCT	TGT	CTC	CCG									
	F	V	S	C	L	P									
	GTC	ACG	GGG	ATC	CAG	CAC									
	V	T	A	I	Q	H									
	GGC	CCC	CCC	AAG	GGC	GAC									
	G	P	P	K	G	D									
	F														F

FIGURE 10D

E - - - - -
 AAC TGG TTC GAG AAG CAG ACG AAA GGG ACG ATC GAT ATC ACG
 N W F E K Q T K G T I D I T
 TGG TTC TTT GGT GGG CTG CAG TTC CAG TTG GAG CAC CAC TTG
 W F F G G L Q F O L E H L
 GGG CAG CTT AGG AAG ATT GCG CCC TTG GCT CGG GAC TTG TGT
 G Q L R K I A P L A R D L C
 TAT AGG AGC TTC GGG TTT TGG GAC GCT AAT GTC AGG ACA ATT
 Y R S F G F W D A N V R T I
 GCG GTT CAG GCG CGT GAC CTT AAT TCG GCC CCG TGC CCT AAG
 A V Q A R D L N S A P C P K
 GCT TAT AAC ACC CAT GGT TGA TTG TGG TTT TGT GTT GTG GGT
 A Y N T H G *
 TTGATTTATGTCCACAATATTGAACCTGAATAACCATGGAAGGCACCTACGTTTCAGCT
 CCCTTGTTGGGGCAAGTGCAGTATTTATTTCTTATCCCATGTACTTTTGGATT
 TAATTTATTTGATTAAATTTTGTGTAGTTGGGTGCTATAGCAAGTTTATAAT
 AAAAAAAA
 G - - - - - G

FIGURE 10E

F - - - - - F
 TGC CCA CCG TGG ATG GAC
 C P P W M D
 TTC CCT AGG CTG CCG CGT
 F P R L P R
 AAG AAG CAC GGG ATG CCG
 K K H G M P
 CCG ACG CTG AGG GAT GCG
 R T L R D A
 AAA CTT GGG TAT GGG GAA
 K L G Y G E
 TGG AGG ATC TTC TTA TTA

 TAACCTTTGCTAGCTGGTTGCGTT
 ATTGTTCTTATTTCGTATCATATAA
 ACTGAGATATATTTTTTTGGTAA

 G - - - - - G

FIGURE 10F

EP vs Bo Delta 6-desaturase Formatted Alignment

EPD6prot	MEGEAKKYIT	AEDLRHMKKS	GDLWISIQGK	VYDVSRWAAE	HPGGEVPLLM	50		
BoD6prot	MAAQIKKYIT	SDELKNDKIP	GDLWISIQGK	AYDVSDWVKD	HPGGSFPLKS	50		
Consensus	M...KKYIT	...L...H.K.	GDLWISIQGK	.YDVS.W.	HPGG..PL..	50		
EPD6prot	LAGQDVTDAF	IAYHPGTAWR	HLDP	FTGYYLKDFE	VSEIS	KDYRRRLNEIM	100	
BoD6prot	LAGQEVTDAF	VAFHPASTWK	NLDKFF	FTGYYLKDYSEVS	KDYRRRLVFEF	100		
Consensus	LAGQ.VTDAF	.A.HP...W.	.LD.	FTGY Y LKD..	VSE.S	KDYR.L.E.	100	
EPD6prot	SRSGI	FEKKG	HIMMTFVG	AVMMAAIVYG	VIASESVGVH	MLQGALLGL	150	
BoD6prot	SKMGLYDKKG	HIMFATLCFI	AIMLFAMSVYG	VLFCEGVLVH	LFSGCLMGFL	150		
Consensus	S..G..KKGH	...T...H	A...A...VYGVL	.E.V.VH	.G.L.G.L	150		
EPD6prot	WIQAAYMGHD	SGHYQVMPTR	GYNRI	TQLIA	GMILLIGISIA	WWKWI	HNAHH	200
BoD6prot	WISGWI	GHD	AGHYMVVSDS	RINKFMGIFA	ANCLSGISIG	WWKWN	HNAHH	200
Consensus	WIQ...GHD	.GHY.V.	.N...N.	.A...A	.N.L.GISI.	WWKW.	HNAHH	200

A-----A

FIGURE 11A

A - - - - - A

EPD6prot	L	A	C	N	S	L	C	Y	D	P	D	L	Q	H	I	P	V	F	A	V	S	T	R	I	F	N	S	I	T	S	V	F	Y	G	R	V	L	R	F	D	E	V	A	R	F	I	V	S	Y	Q	250
BoD6prot	I	A	C	N	S	L	E	Y	D	P	D	L	Q	V	I	P	F	L	V	V	S	S	K	F	G	S	L	T	S	H	F	Y	E	K	R	L	I	F	D	S	L	S	R	F	F	V	S	Y	Q	250	
Consensus	.	A	C	N	S	L	.	Y	D	P	D	L	Q	.	I	P	.	V	S	.	.	S	.	.	F	.	S	.	T	S	.	F	Y	.	.	L	.	F	D	.	.	R	F	.	V	S	Y	Q	250		

EPD6prot	H	W	T	M	Y	P	V	M	I	F	G	R	V	N	L	F	I	Q	T	F	L	L	L	T	R	R	C	V	P	D	R	A	L	N	L	M	G	I	A	V	F	W	T	W	F	P	L	F	V	300	
BoD6prot	H	W	T	R	Y	P	I	M	C	A	A	R	L	N	M	Y	V	Q	S	L	I	M	L	L	T	R	R	N	V	S	Y	R	A	Q	E	L	I	G	C	L	V	F	S	I	W	Y	P	L	I	V	300
Consensus	H	W	T	.	Y	P	.	M	.	.	R	.	N	.	.	Q	L	L	T	.	R	.	V	.	.	R	A	.	L	.	G	.	.	V	F	.	W	.	P	L	.	V	300			

EPD6prot	S	C	L	P	N	W	P	E	R	I	F	G	F	V	L	I	S	F	A	V	T	A	I	Q	R	V	Q	F	I	L	N	H	F	S	G	D	T	Y	V	G	P	P	K	G	Q	N	W	F	E	K	Q	350
BoD6prot	S	C	L	P	N	W	G	E	R	I	.	M	F	V	I	A	S	L	S	V	T	G	M	Q	Q	V	Q	F	S	L	N	H	F	S	S	S	V	Y	V	G	K	P	K	G	N	W	F	E	K	Q	350	
Consensus	S	C	L	P	N	W	.	E	R	.	.	F	V	.	.	S	.	.	V	T	.	.	Q	.	V	Q	F	.	L	N	.	H	F	S	.	.	Y	V	G	.	P	K	G	.	N	W	F	E	K	Q	350	

EPD6prot	T	K	G	T	I	D	I	I	C	P	P	W	M	D	W	F	F	G	G	L	Q	F	Q	L	E	H	H	L	F	P	R	I	P	R	G	Q	L	R	K	I	A	P	L	A	R	D	L	C	K	K	400
BoD6prot	T	D	G	T	L	D	I	S	C	P	P	W	M	D	W	F	H	G	G	L	Q	F	Q	I	K	H	H	L	F	P	K	M	P	R	C	N	L	R	K	I	S	P	Y	V	I	E	L	C	K	K	400
Consensus	T	.	G	T	.	D	I	.	C	P	P	W	M	D	W	F	.	G	G	L	Q	F	Q	.	K	H	H	L	F	P	.	P	R	.	.	.	L	R	K	I	.	P	.	.	.	L	C	K	K	400	

B - - - - - B

FIGURE 11B

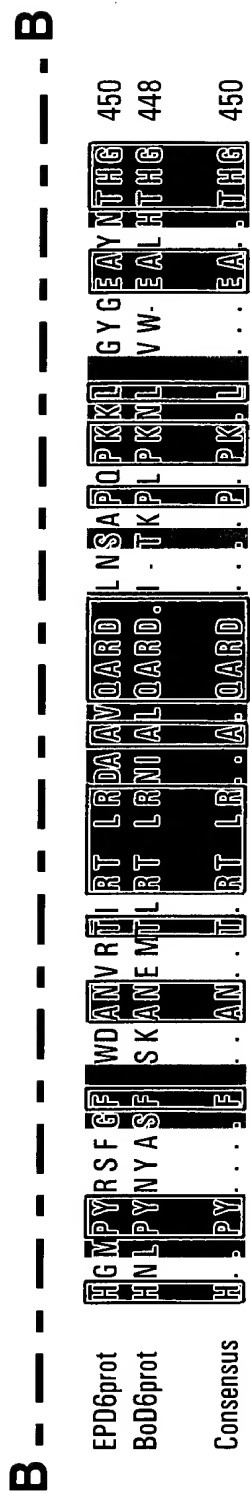
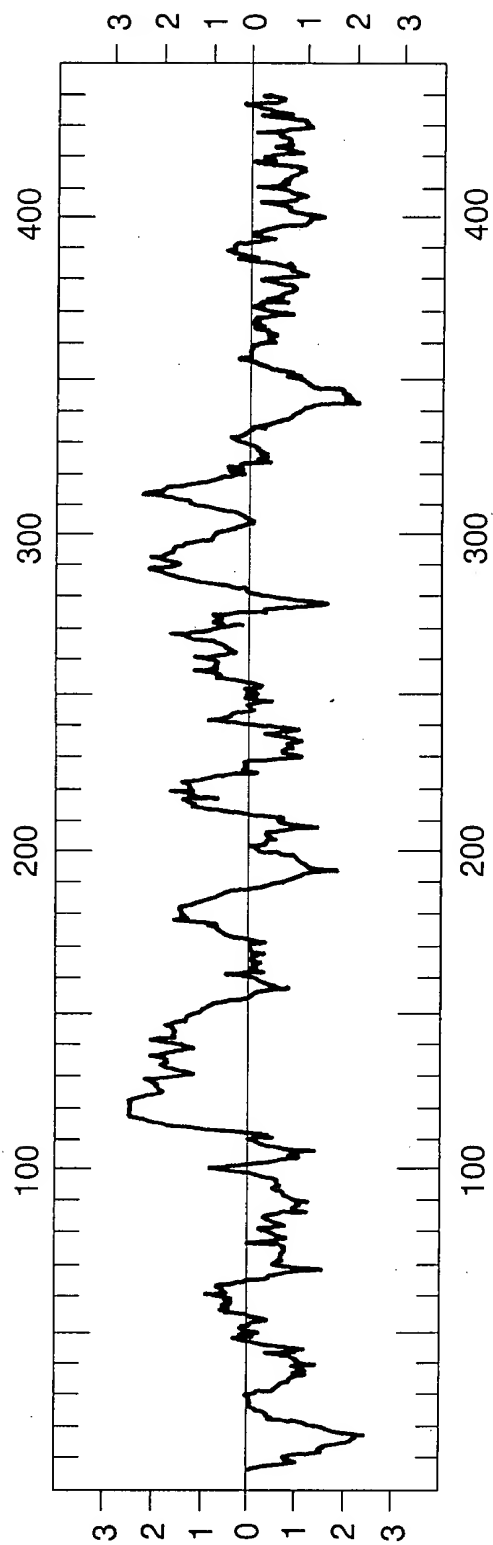
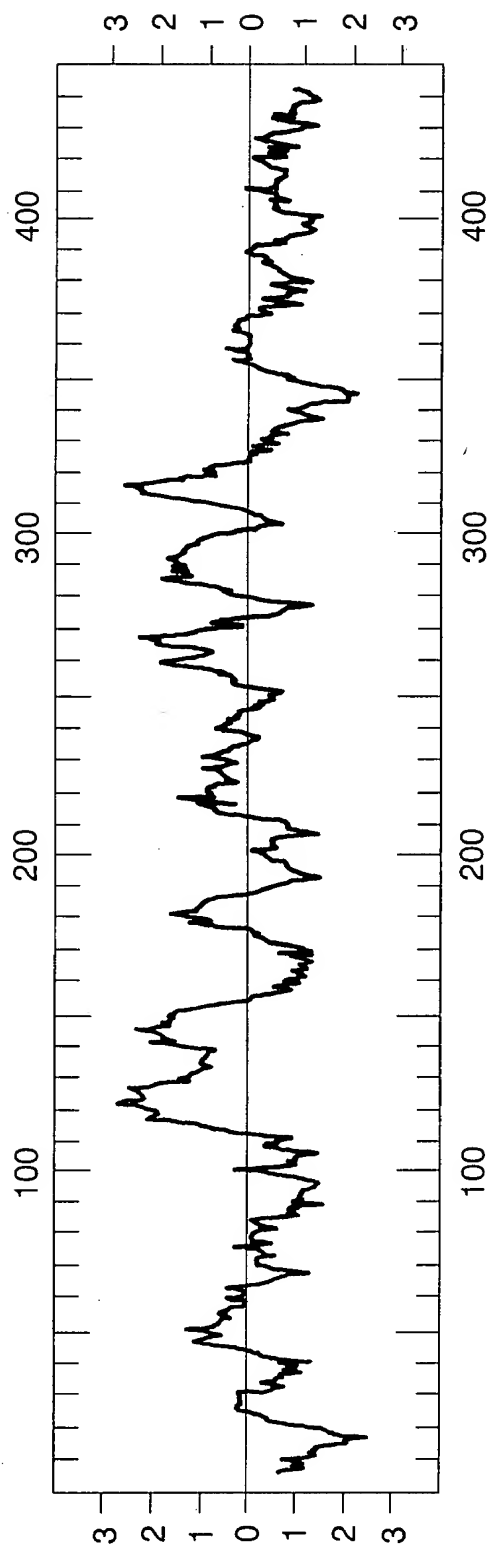


FIGURE 11C



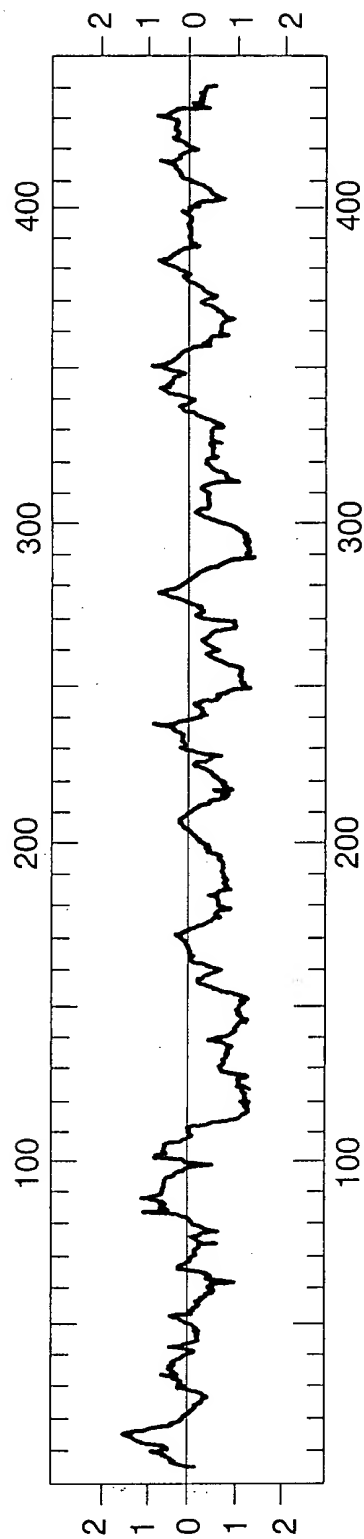
Borage Δ^6 -Desaturase Kyte-Doolittle Hydrophobicity Plot

FIGURE 12A



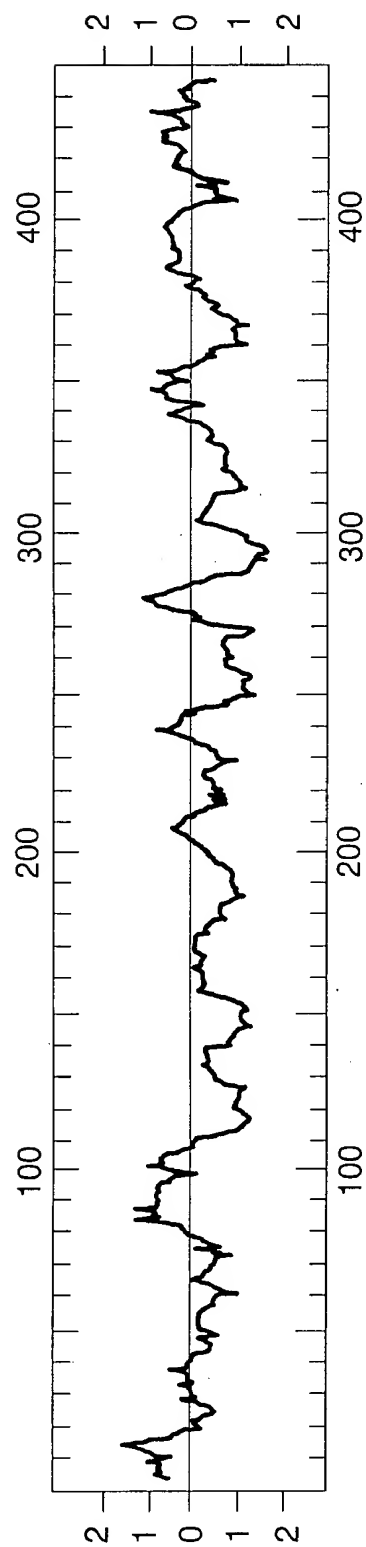
Evening Primrose Putative Δ^6 -Desaturase Kyte-Doolittle Hydrophobicity Plot

FIGURE 12B



Borage Δ^6 -Desaturase Hopwood Hydrophilicity Plot

FIGURE 13A



Evening Primrose Putative Δ^6 -Desaturase Hopwood Hydrophobicity Plot

FIGURE 13B

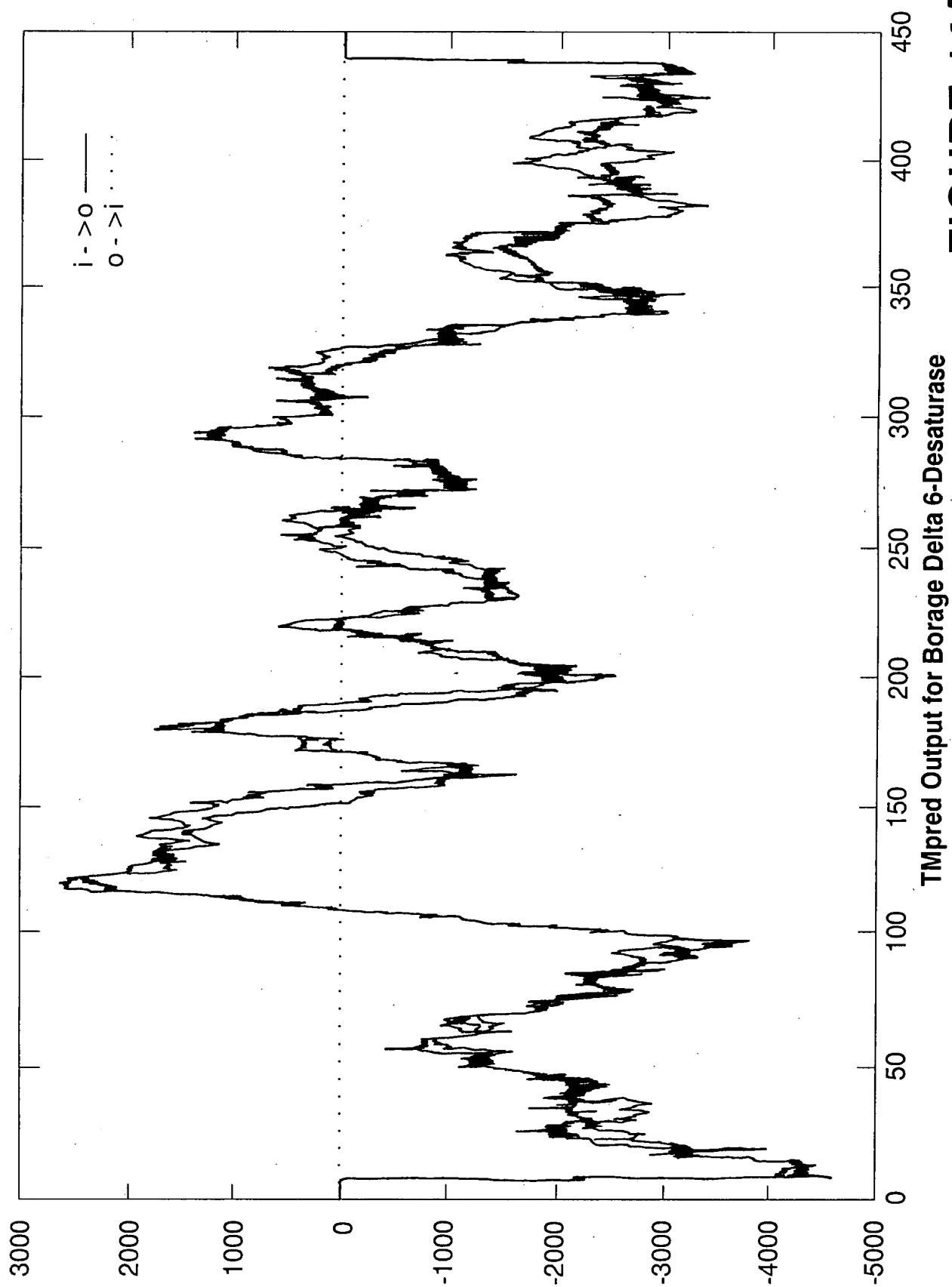
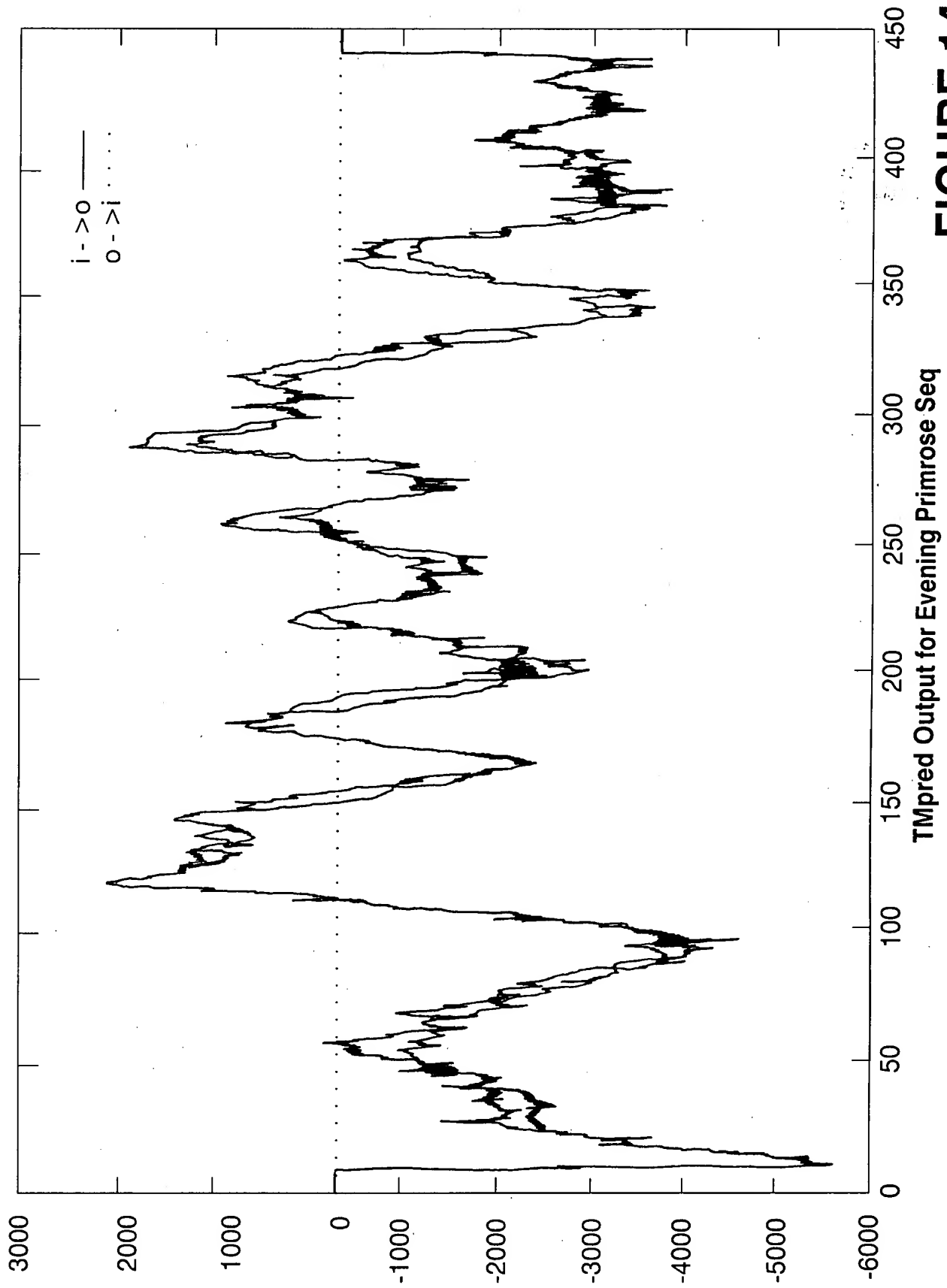


FIGURE 14A

**FIGURE 14B**